

# **BUREAU OF ENVIRONMENT CONFERENCE REPORT**

**SUBJECT:** NHDOT Monthly Natural Resource Agency Coordination Meeting

**DATE OF CONFERENCE:** October 21<sup>st</sup>, 2015

**LOCATION OF CONFERENCE:** John O. Morton Building

**ATTENDED BY:**

**NHDOT**

Matt Urban  
Ron Crickard  
Anthony Weatherbee  
Mark Hemmerlien  
Kerry Ryan  
David Scott  
Jim Kirouac  
Cheryl Rasmussen  
Matt Healey  
Jennifer Reczek  
Bob Landry  
Ron Kliener  
Meli Dube

**Army Corps of Engineers**

Micheal Hicks  
Michael Wierbonks  
Michael Kamnski  
Chris Marron

**NHDES**

Gino Infascelli  
Lori Sommer  
(Gilford/Farmington only)  
Corey Clark

**NH Fish & Game**

Carol Henderson

**NH Natural Heritage  
Bureau**

Amy Lamb

**Stantec**

Timothy Adams  
Michael Hazelett

**CLD**

John Byatt

**Town of Farmington**

Dale Sprauge

**PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH:**

*(minutes on subsequent pages)*

|  |   |
|--|---|
| Finalization of September 16 <sup>th</sup> Meeting Minutes ..... | 2 |
| Acworth 095/060, 40749, Non-Federal .....                        | 2 |
| Acworth (104/063 & 105/064, 40750, Non-Federal .....             | 2 |
| Acworth (157/067), 40751, Non-Federal .....                      | 3 |
| Stewartstown, 16312, X-0001(240) .....                           | 3 |
| Seabrook-Hampton, 40424, X-A004(397) .....                       | 5 |
| Gilford, 16297, X-A003(033).....                                 | 6 |
| Farmington, 16146, X-A001(152).....                              | 7 |

*(When viewing these minutes online, click on a project to zoom to the minutes for that project)*

**NOTES ON CONFERENCE:****Finalization of September 16<sup>th</sup> Meeting Minutes**

The meeting minutes were finalized. No comments were received.

**Acworth 095/060, 40749, Non-Federal**

Tony Weatherbee provided an overview of the project. The scope of the project is to rehab the bridge that carries NH Rte. 123A over Milliken Brook (095/060). The existing structure is a concrete slab bridge with a 14' span. Proposed work consists of installing toewalls and riprap to fix an undermined substructure.

Gino Infascelli asked if we could look into creating rock vanes upstream to divert the water away from the substructure to lessen the likelihood of scour in the future. T. Weatherbee said that there are permanent impacts proposed to accommodate shifting the channel into the center between the abutments. More permanent impacts will be added upstream to rearrange rocks into rock vanes that will direct water away from the abutments.

Mike Hicks asked where OHW would be on the section view and T. Weatherbee said that it will be below the top to the proposed toewall.

Carol Henderson said that this a wild brook trout stream.

M. Hicks asked if we would be doing any tree clearing and if we were there will be time of year restrictions due to potential bat habitat.

C. Henderson asked to reduce channel impacts as much as possible while incorporating a rock vane.

G. Infascelli asked if 4' of the channel would remain open and he said to leave the channel location change shown as permanent impact.

T. Weatherbee asked if there would be mitigation required. Usually maintenance to an existing structure does not require mitigation. G. Infascelli concurred it would not require mitigation.

T. Weatherbee asked C. Henderson if there were any time of year restrictions due to fish passage and she said that if water was maintained through a section of natural channel then there are no restrictions.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

**Acworth (104/063 & 105/064, 40750, Non-Federal)**

Tony Weatherbee provided an overview of the project. The scope of the project is to rehab the existing concrete slab bridges that carry NH Rte. 123A over Slater Slide and Dry Brook. The bridge has a retaining wall that connects the two structures that runs along the Cold River. The retaining wall is undermined and is cracked and spalling. Proposed work consists of facing the retaining wall with concrete and installing concrete toe walls and riprap.

To dewater the workzone a temporary channel is proposed to be dug through a sandbar on the inside of a curve on the Cold River. Material will be pushed off to the side to create that channel and upon project completion the material will be moved back to its original location. Some equipment would be required to dig the channel.

Gino Infascelli showed concern with the location of the bridge structures on the map and Matt Urban and T. Weatherbee clarified.

Mike Hicks mentioned EFH Habitat and said to coordinate with Mike Johnson.

G. Infascelli asked how long it would take to complete the project. T. Weatherbee said that it could take around a month if there are no unforeseen circumstances dealing with the water or weather. G. Infascelli asked if using larger sandbags would help make dewatering easier. G. Infascelli asked that a description about the equipment to be used be included with the application and in the construction sequence. He also said that the Designated River type needs to be identified.

C. Henderson asked what time of year the project would be done because there are salmon and trout in the river. T. Weatherbee said it would potentially be done in the summer.

G. Infascelli mentioned that if the structure was in the wrong location then a NHB report would have to be done for the proper location.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

#### **Acworth (157/067), 40751, Non-Federal**

Tony Weatherbee provided an overview of the project. The scope of the project is to rehab the existing concrete slab bridge that carries NH Rte. 123A over Honey Brook. The existing structure is has a 10'-0" max span and is 26'-10" wide. Proposed work consists of installing concrete underpinnings and removing a portion of bedrock from the channel that is directing water into the west abutment.

There would be some permanent impacts in front of the abutment that is not on ledge and for the location where ledge is to be removed.

Carol Henderson said that there are wild brook trout in the stream and that it is best to work in the summer or early fall.

Mark Hemmerlien asked about access and T. Weatherbee said that they will walk into the brook and they can place the riprap from the roadway.

*This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.*

#### **Stewartstown, 16312, X-0001(240)**

Rebecca Martin provided a brief overview of the changes to the project from when it was presented in May of this year. The new proposal includes an expanded span from 50 feet to 80 feet due to constructability concerns. R. Martin explained that the group is hoping to gain a better

understanding of the mitigation concerns associated with the bridge replacement and the proposed longer span. Additional impacts are expected due to the increased bridge span. R. Martin shared that the inspection of the bridge for evidence of bat utilization did not yield any evidence that bats are using the bridge. She commented that the inspection will need to be repeated within 7 days of the start of the bridge work. R. Martin also commented that the clearing necessary for the project is anticipated to be during the inactive season of the Northern Long Eared Bat (NLEB), and so, the project is anticipated to be Not Likely to Adversely Affect the NLEB. R. Martin explained that the rare plant survey was completed this summer, with no signs of either Case's Ladies Tresses or Loesel's Wide Lipped Orchid seen.

Michael Licciardi explained that the bridge on Route 145 over Bishop Brook is on the State's Red List, and is number 6 on the Priority List. The two lane bridge (121/114) is proposed for replacement due to the fact that the bridge deck is in poor condition and the substructure is in serious condition. The road is a 35 mph road.

The project design proposed in May of this year was to be 50 foot span. The length was based on the stream crossing assessment conducted by the Bureau of Environment and the orientation of the stream channel to the roadway (skewed). M. Licciardi explained that the proposed 50 foot span would require extensive excavation and pose construction difficulties. The new proposal is a new bridge with an 80 foot span that will result in a slight grade raise, approximately 1.5 feet of the roadway. M. Licciardi stated that the bridge will be 27 feet wide curb-curb. The new bridge will include a 3 foot bench for wildlife passage on the north side. The length of the project including the bridge will be 570 feet and the roadway alignment will be similar to the existing condition. M. Licciardi described the stormwater treatment that will be incorporated into the project.

M. Licciardi stated that the advertising date for the project is August 23, 2016 and that the bridge will be closed during construction. He described the wetland and stream impacts associated with the project. There are expected to be 163 feet of impacts to the southern bank, 119 feet of linear impacts to the northern bank and around 149 feet of impacts to the channel (431 feet of linear impacts). The project as proposed would include 5,803 square feet of permanent wetland impacts and 2,640 square feet of temporary impacts.

David Scott explained that a shorter span had been intended, but the terrain climbs so significantly that there were anticipated to be constructability issues on the north side. Mike Hicks asked about how the project will impact the hydraulics of the stream, he inquired if the new span would allow more water to pass through. D. Scott explained that the profile of the stream will be approximately the same.

Gino Infascelli inquired about the amount of rip rap intended to be used and if it would be possible to minimize the stone used and re-vegetate more of the bank area. M. Licciardi described the steep slopes in the area that necessitate installation of stone to protect the bridge. G. Infascelli asked if humus might be installed over the stone to promote vegetation above the water level. D. Scott agreed that this is possible but not beneath the structure.

Carol Henderson asked for clarification about the wildlife bench, which was provided by M. Licciardi.

Matt Urban commented that when he reviewed the plans he believed there might be opportunity to take some credit for the area directly under the bridge where impacts already exist. G. Infascelli thought this seemed possible and recommended a discussion with Lori Sommer.

Amy Lamb recommended comparing any new impact areas to the project area that was previously surveyed. If impacts are proposed outside of the original area surveyed, they should be evaluated for potential impacts to the rare roadside plants.

M. Urban clarified that the rip rap will be keyed in to the channel but will not represent a new restriction to the channel.

A discussion with Lori Sommer was held briefly during the meeting break. She asked for a set of plans to review the new impacts. L. Sommer thought that mitigation would likely be required for the new bank and channel impacts but not the other wetland impacts.

#### **Seabrook-Hampton, 40424, X-A004(397)**

Meli Dube, NHDOT, provided an overview of the project area and proposed scope of work. This project involves resurfacing US Route 1 from MM1.8 in Seabrook to MM5.2 in Hampton with potential curb and guardrail replacement, minor drainage work and minor repair work on two bridges carrying US1 over the Hampton Falls River and the Taylor River. Due to the lack of a set scope, the project was brought to the meeting for the purpose of an initial review of the sensitive resources in the area. These resources include tidal waters and tidal buffer zone, protected shoreland, rare plant species, flood zones and invasive species associated with Dodge Pond, Hampton Falls River and the Taylor River. M. Dube does not anticipate impacts to flood zones because no fill is anticipated as part of the project. M. Dube requested input on whether impacts associated with curb resetting, in kind guardrail replacement, guardrail extension, resurfacing and the bridge work within the tidal buffer zone would require a wetlands permit. Gino Infascelli, NHDES, indicated that any rail and curb work would require a permit and suggested reviewing a similar job on Interstate 95 in the Town of Hampton Falls as an example of how to permit earth disturbing work within a previously disturbed tidal buffer zone. Mike Hicks, ACOE, noted that the ACOE does not have jurisdiction in tidal uplands but that any fill below the highest observable tide line within the salt marsh would not qualify for a Standard Programmatic General Permit (SPGP) but would instead require an Individual Permit.

Jennifer Reczek, NHDOT, gave a description of the work proposed at the two bridges. The bridge over the Hampton Falls River would involve pavement and membrane removal and replacement and partial to full depth deck repair, as well as patching spalled concrete on the abutments. Work on the Taylor River bridge involves pavement and membrane removal and replacement patching and repairs to spalled concrete at the corner of the deck and abutment. Work at both structures would require access during several low tide windows to chip out the bad concrete and install the patching. Matt Urban, NHDOT, asked for confirmation that impacts associated with the bridge work constitute only temporary impacts and not permanent impacts to the wetlands, G. Infascelli agreed. M. Hicks indicated that this work would qualify under the ACOE SPGP but that there may be time of year restrictions associated with work in the channel due to conflicts with Essential Fish Habitat. Due to tidal buffer zone impacts, the permit will also need to be approved individually by the Governor and Council. M. Hicks also inquired about review of the Cultural Resources in the

area and M. Dube indicated that coordination with the BOE Cultural Resources Program is ongoing.

Amy Lamb, NHNHBB, indicated that a new DataCheck review request should be submitted to include proposed bridge work and possible impacts to salt marshes, as these are exemplary natural communities. Lori Sommer, NHDES, agreed that no mitigation will be necessary for the work within jurisdictional wetland areas.

This project has not been previously reviewed at the Natural Resources Agency Meeting.

### **Gilford, 16297, X-A003(033)**

Tobey Reynolds, NHDOT, gave a brief history of the project including a summary of the April 15, 2015 Natural Resource Agency Meeting at which a preferred alternative was decided upon for the design. The existing 9'x6' box culvert carries West Alton Brook under NH Route 11A just east of the Gilford/Alton Town line. This is a Tier 3 stream located within a 1.6 square mile watershed with associated prime wetlands. This structure was constructed in 1930, is undersized and in poor condition, which makes maintenance of the area very difficult. The chosen alternative proposes a 16' wide, 8' tall closed bottom box culvert with a 2' embedment relocated on a skew to more adequately match the natural stream channel.

Meli Dube, NHDOT, discussed two of the major remaining environmental concerns; relocation of the prime wetland boundary and mitigation for stream and bank impacts. An attempt to re-delineate the prime wetland boundary was made in 2008 based on an assessment of the functions and values of the prime wetland and a field inspection report by Gino Infascelli, NHDES. M. Dube discussed why the current prime wetland boundary does not seem accurate and why the proposed project will not negatively impact the functions and values of the prime wetland. Primarily, the existing prime wetland boundary includes the previously disturbed roadway and an area downstream from the crossing, neither of which contribute value to the wetland. Additionally, increasing the size of the culvert to be compliant with the NHDES Stream Crossing Rules (Env-Wt 900), relocating the culvert to more adequately match the natural stream, removing the existing 8" perch at the outlet and embedding the structure with natural materials to simulate the stream bottom will improve the identified functions of the wetland. L. Sommer, NHDES, agreed that all prime wetland impacts outside of the stream are temporary and therefore do not require mitigation. G. Infascelli agreed that the current prime wetland boundary is inaccurate and suggested consulted Env-Wt 700 for instructions to proceed with a re-delineation. G. Infascelli also indicated that onsite mitigation may be required for prime wetland impacts within the stream. M. Dube reminded the committee that mitigation was discussed at the April, 2015 meeting and L. Sommer had suggested salvaging acceptable vegetation for stabilizing the new bank. M. Dube used the plans to demonstrate that most of the abandoned bank and channel will be replaced with new bank and channel, which shall be appropriately constructed and stabilized using the salvaged vegetation when appropriate. L. Sommer agreed that these areas will not require mitigation, however, new plans comparing the existing and proposed OHW and TOB will be necessary to establish the length of abandoned stream that is not being replaced and will therefore require mitigation. Stantec will create these plans and M. Dube will follow up with G. Infascelli and L. Sommer. G. Infascelli

indicated that the wetland permit will require an additional 30 days for public review and appeal due to the presence of prime wetlands.

G. Infascelli asked what is being done to improve water quality and treat stormwater runoff in the project area. T. Reynolds indicated that stormwater will sheet flow off of the roadway on the stabilized roadside and banks. G. Infascelli indicated concern regarding an existing dysfunctional berm that channels sediment from the roadway and into the stream, T. Reynolds confirmed that the berm can be flattened.

### **Farmington, 16146, X-A001(152)**

Bob Landry provided a very brief project history, as this project has been presented at the resource meeting on several prior occasions. The project is located on NH Route 153 over the Cocheco River. B. Landry explained that ACOE has determined that the current situation puts the Town of Farmington in non-compliance. As such, the ACOE has requested that the Town restore the channel / remove the shoals build up.

B. Landry presented a photo of the shoal and indicated that the shoal was approximately 300' long and 15' wide. (A subsequent field visit determined the shoal to be more accurately about 140' and 10-15' wide.)

Michael Hicks echoed B. Landry's statements indicating the ACOE wants the shoals to be removed.

Gino Infascelli asked why the ACOE has determined the levee/shoals to be deficient. He asked if there were any records available indicating why.

John Byatt indicated that it was his understanding that the ACOE viewed the shoals as decreasing the capacity of the channel.

Lori Sommer asked about specific details regarding the channel and bank impacts. She asked what hydraulic studies were indicating what would happen if the shoal was removed vs. left in place.

G. Infascelli asked about how much material needed to be removed.

B. Landry indicated that it would be approximately 6" to 1' in depth of material that needs to be removed.

G. Infascelli reiterated the importance for them to be able to justify the "Need".

B. Landry indicated that there were legal documents that required maintenance of the levee between the Town and the ACOE. As such, B. Landry indicated the need is based on a federal requirement. B. Landry indicated that the Department would get the reports and/or any information regarding the agreement between the ACOE and the Town to DES to assist in documenting the need.

G. Infascelli indicated that there were invasive species in the project area and stated that they would need to be addressed under this project.

B. Landry indicated to the group that the Department would further look into completing a hydraulic study that looks at the before and after effects of removing the shoal.

L. Sommer reminded the Department that they should coordinate with the Cocheco River Advisory Committee.

Amy Lamb indicated that the NHB report would need to be updated as well.

Dale Sprague, from the Town of Farmington, expressed that he also felt another justifiable need for the shoal removal was that they were concerned about impacting the abutter on the opposite side of the river if nothing is done.

Carol Henderson asked if the bridge work that is proposed will prevent future aggradation. The Department indicated that it is a possibility since the new structure will be larger and less of a restriction.